United States Department of the Interior
Bureau of Land Management

FINDING OF NO SIGNIFICANT IMPACT
DOI-BLM-UT-W020-2017-0019-EA

Telescope Array Times Four Project
January 2019

Location: Milliard and Juab Counties – Salt Lake Meridian, Utah. R. 6W-11W and T. 12S-23S, various sections.

Applicant/Address: The University of Utah, Department of Physics
North Physics Building, Room 201
115 South 1400 East
Salt Lake City, Utah 84112

Bureau of Land Management

West Desert District
Fillmore Field Office
95 East 500 North
Fillmore, Utah 84631
Phone: (435) 743-3100
Fax: (435) 743-3135

BLM

Fillmore Field Office

FINDING OF NO SIGNIFICANT IMPACT
ENVIRONMENTAL ASSESSMENT
DOI-BLM-UT-W020-2017-0019-EA
Telescope Array Times Four Project (TAx4)

Based on my review of the analysis found in the Telescope Array Times Four (TAx4) Environmental Assessment (EA) DOI-BLM-UT-W020-2017-0019-EA and the 2006 Telescope Array Cosmic Ray (TA) Project (DOI-BLM-UT-EA-UT-010-05-034 signed May 2006); hereafter referred to as the TA EA; (BLM 2006) to which it tiers, I have determined that the Proposed Action is not a major federal action and will not significantly affect the quality of the human environment, individually or cumulatively with other actions in the area. No effects identified in DOI-BLM-UT-W020-2017-0019-EA and DOI- DOI-BLM-UT-EA-UT-010-05-034 meet the definition of significant in context or intensity as described in 40 CFR 1508.27. Therefore, the preparation of an Environmental Impact Statement is not required as per Section 102(2) of the National Environmental Policy Act.

Context

The project is a site-specific action directly involving approximately 540,800 acres of which the BLM administers approximately 460,000 acres. Millard and Juab Counties are rural; the primary land uses are livestock grazing, agriculture, mining and light industrial development. The proposed project, in conjunction with these activities, is not expected to result in any cumulative impacts.

Intensity

The following discussion is organized around the Ten Significant Criteria described in 40 CFR 1508.27 and incorporated into resources and issues considered (includes supplemental authorities Appendix 1 H-1790-1) and supplemental Instruction Memorandum, Acts, Regulations, and Executive Orders.

1. Impacts may be both beneficial and adverse.

The EA, and the TA EA (BLM 2006) to which it is tiered, considered both the beneficial and adverse impacts of the proposed action on resources and issues. No "significant" impacts were identified in either EA. Project design features (Section 2.2.1 in the EA) are incorporated into the proposed action to minimize or eliminate short and long-term adverse impacts to resources.

The short and long-term impacts to resources and values within the project area arise from the direct and indirect effects of managing vegetation communities to achieve the goals for the overall analysis area.

None of the environmental impacts discussed in detail Telescope Array Times Four (TAx4) Environmental Assessment (EA) DOI-BLM-UT-W020-2017-0019-EA and the 2006 Telescope Array Cosmic Ray (TA) Project (DOI-BLM-UT-EA-UT-010-05-034 signed May 2006) are considered significant, nor do the effects exceed those described in the following land use plans: House Range Resource Area Resource Management Plan (1987) and also the Warm Springs Resource Area Resource Management Plan (1987).

2. The degree to which the proposed action affects public health or safety.

The proposed action is not expected to affect public health or safety. No issues relating to public health and safety were identified through the scoping and issue identification process.

3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, parklands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

The project area exhibits landforms, vegetation communities, biological resources, geologic attractions, and cultural resources typical of the eastern Great Basin. There are no parklands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas within the project area. The environmental analysis did not identify any resources considered to have unique characteristics within the project area.

4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.

There is no scientific controversy over the nature of the impacts.

5. The degree to which the possible effects on the human environmental area highly uncertain or involve unique or unknown risks.

Even though the proposed project of detecting cosmic rays may be unique, the construction and placement of the facilities are not. The environmental effects to the human environment are fully analyzed in the EA. There are no predicted effects on the human environment that are considered to be highly uncertain or involve unique or unknown risks.

6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

The actions considered in the selected alternative were considered by the interdisciplinary (ID) team within the context of past, present, and reasonably foreseeable future actions. Significant cumulative effects are not predicted. A complete analysis of the direct, indirect, and cumulative impacts of the selected alternative and all other alternatives is described in Chapter 4 of the EA.

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts, which include connected actions regardless of land ownership.

The ID team evaluated the possible actions in context of past, present and reasonably foreseeable actions. Significant cumulative effects are not predicted. A complete disclosure of the impacts of the project is contained in Chapter 4 of the EA.

8. The degree to which the action may adversely affect districts, site, highways, structures, or objects listed in or eligible for listing in the NRHP or may cause loss or destruction of significant scientific, cultural, or historical resources.

The project will not adversely affect districts, sites, highways, structures, or other objects listed in or eligible for listing in the National Register of Historic Places, nor will it cause loss or destruction of significant scientific, cultural, or historical resources. None of these would be significantly impacted due to the implementation of the EPMs described in Section 2.1.5 of the EA and the mitigation measures and monitoring described in Alternative B of the EA. A cultural inventory will be completed for the Proposed Action, and all cultural resources found will be avoided.

Before any deployment or construction activities are undertaken, appropriate cultural resource inventories/clearances in accordance with BLM and Utah State Historic Preservation Office (SHPO) guidance will be completed by the University. The University must comply with all SHPO recommendations as approved by the BLM regarding all cultural resource sites. A Notice to Proceed will not be issued and deployment will not occur until the Section 106 process is complete. (See Exhibit A - Response to Comments)

9. The degree to which the action may adversely affect and endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act (ESA) or 1973.

The only threatened or endangered plant or animal species known to occur in the area is the Bald Eagle that uses the area in the winter.

The use of helicopters for deployment and initiation of the SDs would create short-term impacts to Bald Eagles due to the noise and human activity. The noise of the helicopters and the human activity could disrupt breeding and brooding behaviors and cause possible nest abandonment of nesting Bald Eagles.

Completing the surveys will identify the locations of active nests. Nesting periods and recommended buffers for raptors in Utah are identified in the EA. Potential short-term impacts to the Bald Eagle from noise and human activity are mitigated by requirements for spatial and seasonal buffers along with monitoring as described in the EA, Section 2.2 Alternative B, Wildlife, Raptors, and as shown in the decision below.

The ferruginous hawk, burrowing owl, kit fox and the currant milkvetch are sensitive species known to occur in the project area.

The use of helicopters for deployment and initiation of the SDs would create short-term impacts to raptors, burrowing owls and the kit fox due to the noise and human activity. The noise of the helicopters and the human activity could disrupt breeding and brooding behaviors and cause possible nest abandonment of nesting raptors and burrowing owls, and den abandonment by the kit fox.

Due to the absence of proposed project wide nesting raptor, burrowing owl and kit fox surveys the magnitude of these impacts is unknown. There is potential to adversely affect sensitive raptors, burrowing owls and kit fox.

Completing the surveys required in Proposed Action will identify the locations of active nests, burrows and dens. Protective mitigation measures are identified in the EA. Nesting periods and recommended buffers for raptors in Utah are identified in Appendix D of the EA. See the decision below for mitigation for raptors, burrowing owl and kit fox.

Currant milkvetch was the only sensitive BLM plant species located in the project area. TA project facilities will be relocated to avoid currant milkvetch plants.

BLM, UDWR and Fish and Wildlife Services developed the above mitigation and monitoring measures through an informal consultation process.

10. Whether the action threatens a violation of Federal, State, or local low or requirements imposed for the protection of the environment.

The project does not violate any known federal, state, local or tribal law or requirement imposed for the protection of the environment. State, local, and tribal interests were given the opportunity to participate in the environmental analysis process.

Letters to the Paiute Tribe of Utah (PITU)-Cedar City and Kanosh Bands, Confederated Tribes of the Goshute Reservation, Skull Valley Goshute Tribe and the Uinta/Orray Ute Tribe concerning consulting party status. Two responses were received with no issues or concerns identified.

The PITU Representatives expressed three concerns all of which have been addressed:

- The University conducted a 100% survey for all the proposed project facilities.
- The University agreed to avoid all sites, both eligible and not eligible.
- Buffer zones would be 30 meters from any site boundary.

Field Manager, BLM Fillmore Field Office

February 1, 2019
Date